



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,811	01/21/2004	Jin Ho Hyun	2080-3-220	6196

35884 7590 03/12/2007  
LEE, HONG, DEGERMAN, KANG & SCHMADEKA  
801 S. FIGUEROA STREET  
12TH FLOOR  
LOS ANGELES, CA 90017

EXAMINER
----------

SCHNURR, JOHN R

ART UNIT	PAPER NUMBER
----------	--------------

2623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/762,811	HYUN, JIN HO	
	<b>Examiner</b>	<b>Art Unit</b>	
	John R. Schnurr	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6 and 9-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 2623

***Response to Arguments***

1. Applicant's arguments with respect to claims **1, 3-6 and 9-13** have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims **1, 4-6, 9 and 11-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Schrader et al. (US Patent Application Publication 2002/0166123)** (Schrader) in view of **Freeman et al. (US Patent Application Publication 2001/0013123)** (Freeman).

Consider **claim 1**, Schrader clearly teaches a digital broadcast storage device using a mark-up language.

A digital broadcasting storage device using a mark-up language (**Fig. 5: Shows a DVR 530 for receiving and storing digital broadcast data, [0078] Schrader. The received data may be transmitted as Extensible Markup Language (XML), [0047].**)

user interface means adapted to allow broadcasting information to be used or searched; (**Fig. 8 shows a display of a user navigation guide which enables the user to use or search program information with display area 816 or course navigation bar 818. [0103] Schrader**)

metadata processing means adapted to process and parse received XML (Extensible Markup Language)--formatted broadcasting information; (**Fig. 5: Receiver 120 receives and processes XML data. [0047] Schrader**)

Art Unit: 2623

storage means adapted to store the received and parsed broadcasting information; **(Fig. 5: Mass storage device 542 stores the processed broadcast information. [0086] Schrader)**

searching means adapted to search and provide the stored received and parsed broadcasting information; **(Fig. 8: Navigation guide 800 allows the user to search the broadcast information. [0103] Schrader)** and

controlling means adapted to control the processing, storage and searching of the received and parsed broadcasting information. **(Fig. 5: Processing unit 532 controls operation of the STB 120. [0085] Schrader)**

Schrader further teaches that the device contains information about viewer preferences, [0091] Schrader. However, Schrader does not explicitly teach extracting the preferences based on either user input or from a watch record based on digital broadcasts previously accessed by the user. Specifically, Schrader does not teach:

wherein the metadata processing means further comprises preference extracting means adapted to extract a preference that is one of directly inputted by a user and automatically created from a watch record based upon specific digital broadcasts previously accessed by the user.

In an analogous art Freeman, which discloses a system for receiving digital broadcast information, clearly teaches:

wherein the metadata processing means further comprises preference extracting means adapted to extract a preference that is one of directly inputted by a user and automatically created from a watch record based upon specific digital broadcasts previously accessed by the user. **(User preference information may be directly input from the user or it may be collected based on the programming selections of the user. [0031])**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schrader by obtaining the viewer preference information directly from the user or from the viewing history of the user, as taught by Freeman, for the benefit of providing programming that is of interest to the viewer (See [0008] Freeman).

Art Unit: 2623

Consider **claim 4**, Schrader modified by Freeman, as in claim 1, clearly teaches a digital broadcast storage device using a mark-up language.

database managing means (**CPU 532, application specific integrated circuit (ASIC) 534, mass storage device 542. Schrader**) for managing information of the storage means; (**The system maintains a meta-data directory of recorded programs, index files and control files. [0127] Schrader**)

media file system managing means (**DVR device 530, mass storage device 542, Schrader**) for managing a file system; (**FIGS. 17a through 17c illustrate an association of various enhanced files with a DVR index file. [0134] Schrader**) and a

media router (**video output circuit 560**), **Schrader** for controlling a peripheral device (**display device 122, Schrader**).

Consider **claim 5**, Schrader clearly teaches a digital broadcast storage device using a mark-up language.

a media management engine adapted to manage at least one of recording and reproduction of at least one of digital video and digital audio (**Fig. 5: ASIC 534 is coupled to system memory 538 and storage device 542 to permit data to be read from and written to the system memory, [0085] Freeman. Video data 550, digital programming [0040] Freeman, is stored on the mass storage device 542. [0086] Schrader**)

a metadata processing engine adapted to process and store the XML-formatted information; (**Fig. 16b and 16c: The system maintains a meta-data directory containing program information obtained from the XML formatted data. [0127] Schrader**)

an XML parsing engine adapted to parse the stored XML-formatted information. (**Data processing engine is adapted to process the received XML data. [0094] Schrader**)

Consider **claim 6**, Schrader clearly teaches a digital broadcast storage device using a mark-up language.

Art Unit: 2623

A digital broadcasting storage method using a mark-up language (Fig. 5: Shows a DVR 530 for receiving and storing digital broadcast data, [0078] Schrader. The received data may be transmitted as Extensible Markup Language (XML), [0047] Schrader.)

receiving XML-based broadcasting information; (Data may be transmitted to the client system as XML data. [0047] Schrader)

extracting metadata from the received XML-based broadcasting information; (Event logs are transmitted to the client system and the XML meta data is extracted and associated with recordings. [0065] Schrader)

processing, parsing and storing the extracted metadata; (The system maintains a meta-data directory of the processed meta-data. [0127] Schrader) and

searching the stored metadata in response to a user's request to provide the broadcasting information (Fig. 8 shows a display of a user navigation guide which enables the user to use or search program information with display area 816 or course navigation bar 818. [0103] Schrader)

Schrader further teaches that the device contains information about viewer preferences, [0091] Schrader. However, Schrader does not explicitly teach extracting the preferences based on either user input or from a watch record based on digital broadcasts previously accessed by the user. Specifically, Schrader does not teach:

the search performed according to a user preference that is one of directly inputted by the user and automatically created from a watch record based upon specific digital broadcasts previously accessed by the user.

In an analogous art Freeman, which discloses a system for receiving digital broadcast information, clearly teaches:

the search performed according to a user preference that is one of directly inputted by the user and automatically created from a watch record based upon specific digital broadcasts previously accessed by the user. (User preference information may be directly input from the user or it may be collected based on the programming selections of the user. [0031])

Art Unit: 2623

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schrader by obtaining the viewer preference information directly from the user or from the viewing history of the user, as taught by Freeman, for the benefit of providing programming that is of interest to the viewer (See [0008] Freeman).

Consider **claim 9**, Schrader clearly teaches a digital broadcast storage device using a mark-up language.

A digital broadcasting storage device using a mark-up language **(Fig. 5: Shows a DVR 530 for receiving and storing digital broadcast data, [0078] Schrader. The received data may be transmitted as Extensible Markup Language (XML), [0047].)**

user interface means adapted to allow broadcasting information to be used or searched; **(Fig. 8 shows a display of a user navigation guide which enables the user to use or search program information with display area 816 or course navigation bar 818. [0103] Schrader)**

metadata processing means adapted to process and parse received XML (Extensible Markup Language)--formatted broadcasting information received together with digital audio/video; **(Fig. 5: Receiver 120 receives and processes XML data. [0047] Schrader. Fig. 1: Programming content stream and programming information stream are broadcast to the client together via parallel channels. [0038] Schrader)**

storage means adapted to store the received and parsed broadcasting information; **(Fig. 5: Mass storage device 542 stores the processed broadcast information. [0086] Schrader)**

searching means adapted to search and provide the stored received and parsed broadcasting information; **(Fig. 8: Navigation guide 800 allows the user to search the broadcast information. [0103] Schrader) and**

controlling means adapted to control the processing, storage and searching of the received and parsed broadcasting information. **(Fig. 5: Processing unit 532 controls operation of the STB 120. [0085] Schrader)**

wherein the metadata processing means further comprises preference extracting means adapted to extract a preference in

Art Unit: 2623

order to create a program guide for a specific user (**The device contains information about viewer preferences which is used to filter a program guide presented to the user. [0091] Schrader**)

However, Schrader does not explicitly teach extracting the preferences based on either user input or from a watch record based on digital broadcasts previously accessed by the user. Specifically, Schrader does not teach:

the preference one of directly inputted by the specific user and automatically created from a watch record based upon specific audio/video digital broadcasts previously accessed by the user.

In an analogous art Freeman, which discloses a system for receiving digital broadcast information, clearly teaches:

the preference one of directly inputted by the specific user and automatically created from a watch record based upon specific audio/video digital broadcasts previously accessed by the user.  
**(User preference information may be directly input from the user or it may be collected based on the programming selections of the user. [0031])**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schrader by obtaining the viewer preference information directly from the user or from the viewing history of the user, as taught by Freeman, for the benefit of providing programming that is of interest to the viewer (See [0008] Freeman).

Consider **claim 11**, Schrader modified by Freeman, as in claim 1, clearly teaches a digital broadcast storage device using a mark-up language.

database managing means (**CPU 532, application specific integrated circuit (ASIC) 534, mass storage device 542. Schrader**) for managing information of the storage means; (**The system maintains a meta-data directory of recorded programs, index files and control files. [0127] Schrader**)

media file system managing means (**DVR device 530, mass storage device 542, Schrader**) for managing a file system; (**FIGS. 17a through 17c illustrate an association of various enhanced files with a DVR index file. [0134] Schrader**) and a



Art Unit: 2623

media router (**video output circuit 560**), **Schrader** for controlling a peripheral device (**display device 122**, **Schrader**).

Consider **claim 12**, **Schrader** clearly teaches a digital broadcast storage device using a mark-up language.

a media management engine adapted to manage at least one of recording and reproduction of the received digital audio/video (**Fig. 5: ASIC 534 is coupled to system memory 538 and storage device 542 to permit data to be read from and written to the system memory, [0085] Freeman. Video data 550, digital programming [0040] Freeman, is stored on the mass storage device 542. [0086] Schrader**)

a metadata processing engine adapted to process and store the XML-formatted information; (**Fig. 16b and 16c: The system maintains a meta-data directory containing program information obtained from the XML formatted data. [0127] Schrader**)

an XML parsing engine adapted to parse the stored XML-formatted information. (**Data processing engine is adapted to process the received XML data. [0094] Schrader**)

Consider **claim 13**, **Schrader** clearly teaches a digital broadcast storage device using a mark-up language.

A digital broadcasting reception device receiving broadcasting information based upon XML (Extensible Markup Language) (**Fig. 5: Shows a DVR 530 for receiving and storing digital broadcast data, [0078] Schrader. The received data may be transmitted as Extensible Markup Language (XML), [0047].**)

metadata processing means adapted to process and parse the received broadcasting information based upon XML (**Fig. 5: Receiver 120 receives and processes XML data. [0047] Schrader**)

storage means adapted to store the received broadcasting information based upon XML; (**Fig. 5: Mass storage device 542 stores the processed broadcast information. [0086] Schrader**)

searching means adapted to search and provide the stored received and parsed broadcasting information; (**Fig. 8: Navigation**

Art Unit: 2623

**guide 800 allows the user to search the broadcast information. [0103] Schrader) and**

controlling means adapted to control the processing, storing and searching of the received broadcasting information based upon XML. **(Fig. 5: Processing unit 532 controls operation of the STB 120. [0085] Schrader)**

Schrader further teaches that the device contains information about viewer preferences, [0091] Schrader. However, Schrader does not explicitly teach extracting the preferences based on either user input or from a watch record based on digital broadcasts previously accessed by the user. Specifically, Schrader does not teach:

wherein the metadata processing means further comprises preference extracting means adapted to extract a preference that is one of directly inputted by a user and automatically created from a watch record based upon specific digital broadcasts previously accessed by the user.

In an analogous art Freeman, which discloses a system for receiving digital broadcast information, clearly teaches:

wherein the metadata processing means further comprises preference extracting means adapted to extract a preference that is one of directly inputted by a user and automatically created from a watch record based upon specific digital broadcasts previously accessed by the user. **(User preference information may be directly input from the user or it may be collected based on the programming selections of the user. [0031])**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schrader by obtaining the viewer preference information directly from the user or from the viewing history of the user, as taught by Freeman, for the benefit of providing programming that is of interest to the viewer (See [0008] Freeman).

4. Claims **3 and 10** are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Schrader et al. (US Patent Application Publication**

**2002/0166123)** in view of **Freeman et al. (US Patent Application Publication**

Art Unit: 2623

**2001/0013123**), as applied to claims 1 and 9 above, and further in view of

**Koreeda et al. (US Patent Application Publication 2002/0019979) (Koreeda).**

Consider **claim 3**, Schrader modified by Freeman, as in claim 1, clearly teaches a digital broadcast storage device using a mark-up language enabled with searching means.

However, Schrader modified by Freeman, as in claim 1, does not explicitly teach the searching means using at least one of;

a title, a keyword and a genre according to a user's request and provides the searched information to the user through the user interface means

In an analogous art Koreeda, which discloses a system for receiving audio/video information, clearly teaches:

a title, a keyword and a genre according to a user's request and provides the searched information to the user through the user interface means. **(Fig. 6A and 6C: The user may choose to search by title, keyword or genre, [0080] Koreeda. The results are then displayed to the user. [0081] Koreeda)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schrader modified by Freeman, as in claim 1, by allowing the user to search by title, keyword or genre, as taught by Koreeda, for the benefit of easily reproducing the wanted video/audio (See [0024] Koreeda).

Consider **claim 10**, Schrader modified by Freeman, as in claim 9, clearly teaches a digital broadcast storage device using a mark-up language enabled with searching means.

However, Schrader modified by Freeman, as in claim 9, does not explicitly teach the searching means using at least one of;

a title, a keyword and a genre according to a user's request and provides the searched information to the user through the user interface means

In an analogous art Koreeda, which discloses a system for receiving audio/video information, clearly teaches:

Art Unit: 2623

a title, a keyword and a genre according to the specific user's request and provides the searched information to the specific user through the user's interface means. **(Fig. 6A and 6C: The user may choose to search by title, keyword or genre, [0080] Koreeda. The results are then displayed to the user. [0081] Koreeda)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Schrader modified by Freeman, as in claim 9, by allowing the user to search by title, keyword or genre, as taught by Koreeda, for the benefit of easily reproducing the wanted video/audio (See [0024] Koreeda).

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.**

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2623

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Schnurr whose telephone number is (571) 270-1458. The examiner can normally be reached on Monday - Friday, 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JRS

  
CHRISTOPHER GRANT  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600